



























THE RBV METHOD: This method was developed specifically to facilitate the generation of volunteer water quality monitoring data by:

- 1.) **Being an easy to use, non-technical method**
- 2.) **Eliminating the need for expensive equipment, resources & lengthy time commitment**
- 3.) **Providing usable water quality information for both the data collector and the CT DEP Monitoring program**

Participants collect macroinvertebrate community data once a year in the fall from a site(s) of their local interest. Data are submitted to CT DEP for use in water quality assessments.

RBV ORGANISMS: Each of the RBV organisms were selected due to their statewide distribution, having a unique structure or behavior, and are key ecological indicators. The RBV data sheet below organizes the organisms into 1 of 3 categories based on how sensitive the organism is to environmental disturbance.

Most = very sensitive (blue)
Moderate = somewhat sensitive (yellow)
Least= not sensitive (red)

WATERBURY NAME		COLLECTION DATE			COLLECTION TIME		
LOCATION DESCRIPTION		COLLECTOR NAMES					
TOWN		NOTE/COMMENTS					
MOST	1	2	3	4	5A	5B	5C
	Many water mayfly Dreissid	Many water mayfly Trout fly	Many water mayfly Trout fly	Many water mayfly Trout fly	Many water mayfly Trout fly	Many water mayfly Trout fly	Many water mayfly Trout fly
							
	Locs 182						
	Locs 264						
Locs 268							
MOST	6A	6B	7	8A	8B	DATA INTERPRETATION	
	Common Caddis Caddisfly	Common Caddis Caddisfly	Common Caddis Caddisfly	Common Caddis Caddisfly	Common Caddis Caddisfly	# OF TYPES OF THE "MOST"	WATER QUALITY
						5 OR MORE	EXCEPTIONAL
						3 TO 4	EXCELLENT
						1 TO 3	VERY GOOD
						0	MORE INFO NEEDED TO ASSESS
MODERATE	9	10	11	12	13 A	13 B	14
	Common net-spinner Bee fly	Fingered Caddis Caddisfly	Flat Head mayfly Trout fly	Water Penny Trout fly	Dobsonfly Caddisfly	Flathead Caddisfly	Dragonfly & Damselfly Trout fly
							
	Locs 182						
	Locs 264						
Locs 268							
LEAST	15 A	15 B	15 C	15 D	15 E	15 F	15 G
	Amphipod	Isopod	Leech	Midge	Black fly	Snail	Worm
							
	Locs 182						
	Locs 264						
Locs 268							

WATER QUALITY MONITORING MATERIALS

CT DEP MONITORING PROGRAM

The Consolidated Assessment and Listing Methodology (CALM) is a document describing the methodology used for generating water quality assessments in preparation for the Water Resources Report To Congress [305(b) Report].

http://www.ct.gov/dep/cwp/view.asp?a=2719&q=325612&depNav_GID=1654

The Integrated Water Quality Report to Congress AKA The 305(b) Report contains the water quality assessments for the previous 2-year period. This also includes the "Impaired Waters List". This section of the report contains information related to all waterbody segments that were determined not to meet water quality standards for a designated use.

http://www.ct.gov/dep/cwp/view.asp?a=2719&q=325610&depNav_GID=1654

Water Quality Standards document contains the appropriate criteria for which monitoring data are compared.

<http://www.ct.gov/dep/cwp/view.asp?a=2719&q=32561>

RBV PROGRAM MATERIALS

www.ct.gov/dep/rbv

The above web page contains links for:

Annual data summary reports

Background Material

Method Instructions

RBV datasheet

RBV sorting guide

RBV field identification cards

EPA approved Quality Assurance/Quality

Control Project Plan

RBV Program Coordinator

Mike Beauchene

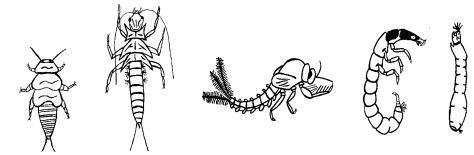
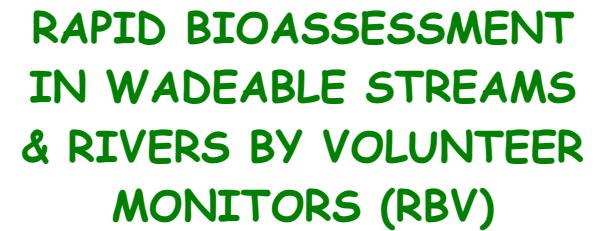
CT DEP Bureau of Water Protection & Land Reuse

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The Ambient Monitoring Program within the CT DEP Bureau of Water Protection & Land Reuse is actively recruiting citizens that are interested in collecting water quality data from streams and rivers in their community. This brochure provides information about the program, Internet access to program materials, and contact information if you would like to become involved.



WATER QUALITY MONITORING OF WADEABLE STREAMS AND RIVERS:

Connecticut's approximately 5,800 miles of rivers and streams are monitored and assessed by staff assigned to the Bureau of Water Protection & Land Reuse, Planning and Standards Division. The monitoring and reporting of water quality assessments completed by these staff are required under state and federal regulations. These summary reports as well as the assessment methodology used to generate the reports are on the CT DEP web page (links are provided on the rear panel of this brochure).

A major component of water quality assessment is a determination of the ecological condition of a particular waterbody. These assessments are primarily based on biological community data that reflect the degree to which the waterbody supports a wide variety of indigenous organisms sensitive to environmental disturbance. Invertebrate community structure is used as the primary indicator of water quality impairment. Sites are compared to an ideal reference community. The level of impairment is based on increasing degree of deviation from the reference condition.

The primary tool for these types of assessments is the riffle-dwelling benthic macro-invertebrate community. These organisms have several advantages for use including: ease of capture, they inhabit a wide range of water quality conditions, and assessment methodology is well established.

RBV RATIONALE: The RBV program capitalizes on these advantages. Specifically the RBV program requires participants to collect and document specific organisms. These organisms are divided into 3 categories (Most, Moderate, and Least) depending upon the sensitivity to environmental degradation. The most useful RBV data are those sites that have at least 5 representatives in the "Most Wanted" category.

RBV TRAINING: A daylong training/data collection workshop can be held for your organization free of charge*. The workshop is structured around instructional power-point presentations in the morning and data collection in the afternoon.

The data collection process is completed on site at a riffle (fast flowing rocky bottom). Participants wade into the water, dislodge the organisms into a net by scrubbing the rocks, sort and identify the different organisms present, and preserve a representative set of organisms for verification. At the completion of the session the data is submitted to the CT DEP for incorporation into water quality assessments.

RBV workshops are scheduled on a first come first serve basis with priority for first time programs. Since the data collection occurs in the fall and there are a fixed number of weekend days, it is better to schedule well in advance. Every attempt will be made to accommodate each workshop request. The CT DEP will provide all of the necessary equipment except for waders, hip boots or other waterproof foot ware.

TO BECOME INVOLVED*:

The prerequisites to sponsor a workshop are to:

- 1.) Assemble a group of at least 6 adults
- 2.) Reserve a meeting room centrally located to the potential monitoring stations. The room must have electricity and be capable of holding all of the participants.
- 3.) Contact Mike Beauchene to schedule a workshop date by phone (860) 424-4185 or email at mike.Beauchene@ct.gov

*Individuals not associated with a monitoring program can be linked with a program in their local area.

RBV WEB PAGE:
www.ct.gov/dep/rbv